Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method of detecting or identifying an analyte of interest in a sample, comprising:

(i) contacting the sample containing the analyte with one or more affinity molecules to form a complex of the analyte and the one or more affinity molecules, wherein each of the one or more affinity molecules has an affinity against the analyte;

(ii) providing a microfluidic device having a separation channel filled with a separation media and ~~a charged polymer~~ polyanion added to the separation media, the separation channel having at least one microscale dimension of between about 0.1 and 500 microns;

(iii) electrophoretically separating the complex and any unbound affinity molecule using the filled separation channel; and

(iv) detecting the complex to identify the presence of the analyte or to determine an amount of the analyte in the sample, wherein the ~~charged polymer~~ polyanion binds sample constituents that bind non-specifically to the one or more affinity molecules, thereby ~~reduces~~ reducing interference with detecting.

2. (canceled)

3. (currently amended) The method of claim ~~2~~ 1, wherein the ~~charged polymer~~ polyanion is ~~a polyanionic polymer~~ selected from the group consisting of polysaccharides, polynucleotides, polypeptides, synthetic macromolecular compounds, ceramics and a complex thereof.

4. (currently amended) The method of claim 1, wherein the ~~charged polymer~~ polyanion is ~~a polyanionic polymer~~ selected from the group consisting of poly-dIdC, heparin sulfate, dextran sulfate, polytungstic acid, polyanethole sulfonic acid, polyvinyl sulfate, polyacrylate, chondroitin sulfate, plasmid DNA, calf thymus DNA, salmon sperm DNA, DNA coupled to cellulose, glass particles, colloidal glass, and glass milk.

5–7 (canceled)

8. (currently amended) The method of claim ~~6~~ 1, wherein the ~~charged polymer~~ polyanion comprises heparin sulfate.

9. (original) The method of claim 1, wherein at least one of the one or more affinity molecules is labeled with a detectable marker.

10. (previously presented) The method of claim 1, wherein at least one of the one or more affinity molecules is bound to a charged carrier molecule to form one or more conjugates of the affinity molecule and the charged carrier molecule, and wherein the charged carrier molecule causes a change in a separation property of the analyte by binding to the analyte through the one or more affinity molecules to form a complex of the analyte, the affinity molecule, and the charged carrier molecule.

11. (original) The method of claim 1 or 10, wherein the affinity molecule is one which binds to the analyte by a protein-protein interaction, a protein-chemical interaction or a chemical-chemical interaction.

12. (original) The method of claim 1 or 10, wherein the affinity molecule is one which binds to the analyte by an antigen-antibody interaction, a sugar chain-lectin interaction, an enzyme-inhibitor interaction, a protein-peptide chain interaction, a chromosome or nucleotide chain-nucleotide chain interaction, a nucleotide-ligand interaction or a receptor-ligand interaction.

13. (currently amended) The method of claim 1 or 10, wherein the affinity molecule is selected from the group consisting of an antibody, an Fab, $F(ab')_2$ or Fab' fragment of an antibody, an antibody variable region, a ~~lection~~ lectin, avidin, a receptor, an affinity peptide, an aptamer, and a DNA binding protein.

14. (currently amended) The method of claim 10, wherein the charged carrier molecule is an anionic molecule ~~or a cationic molecule~~.

15. (currently amended) The method of claim 14, wherein the charged carrier molecule is one having the same net charge as the ~~charged polymer~~ polyanion.

16. (original) The method of claim 14, wherein the charged carrier molecule is an anionic molecule comprising a nucleotide chain or a sulfonated polypeptide.

17. (currently amended) The method of claim 10, wherein the charged carrier molecule comprises DNA, RNA, an ~~cationic~~ anionic polymer, or a sulfonated polypeptide

18. (original) The method of claim 17, wherein the charged carrier molecule comprises DNA comprising one or more synthetic sequences.

19. (original) The method of claim 18, wherein the one or more synthetic sequences comprise one or more nucleotide analogs comprising a linker group or a linker reactive group.

20. (original) The method of claim 19, wherein the linker group or linker reactive group comprises an amino group, a thiol, a carboxyl group, an imidazol group, or a succinimide group.

21. (original) The method of claim 20, further comprising covalently bonding a detectable marker to the linker group or linker reactive group.

22. (previously presented) The method of claim 1, wherein at least one of the one or more affinity molecules is labeled with a detectable marker.

23. (original) The method of claim 10, wherein at least one conjugate or at least one affinity molecule which does not form a conjugate is labeled with a detectable marker.

24. (original) The method of claim 10, wherein at least one affinity molecule and the charged carrier molecule forming the conjugate is labeled by a detectable marker.

25. (original) The method of claim 10, wherein the charged carrier molecule in the conjugate is labeled by a detectable marker.

26. (original) The method of claim 10, wherein the affinity molecule in the conjugate is labeled by a detectable marker.

27. (original) The method of claim 9, 21, 22, 23, 24, 25 or 26, wherein the detectable marker is a fluorescent dye, a luminescent dye, a phosphorescent dye, a fluorescent protein, a luminescent protein or particle, a radioactive tracer, a chemiluminescent compound, a redox mediator, an electrogenic compound, an enzyme, a colloidal gold particle, or a silver particle.

28. (canceled)

29. (currently amended) The method of claim ~~28~~ 1, wherein the separation media comprises a size exclusion resin, a polyacrylamide gel, polyethylene glycol (PEG), polyethyleneoxide (PEO), a co-polymer of sucrose and epichlorohydrin, polyvinylpyrrolidone (PVP), hydroxyethylcellulose (HEC), poly-N,N-dimethylacrylamide (pDMA), or an agarose gel.

30. (canceled)

31. (currently amended) The method of claim 1, wherein the ~~charged polymer~~ polyanion is present in the separation media at a concentration of between about 0.01 to 5%.

32. (currently amended) The method of claim 1, wherein the ~~charged polymer~~ polyanion is present in the separation media at a concentration of between about 0.05 to 2%.

33. (canceled)

34. (canceled)

35. (original) The method of claim 1, wherein the separation channel has at least one cross-sectional microscale dimension of between about 0.1 and 200 microns.

36. (currently amended) The method of claim 1, wherein:

step (i) comprises contacting the sample containing the analyte with the one or more affinity molecules, at least one of the one or more affinity molecules being labeled by a detectable marker, to form a complex containing the analyte and the one or more affinity molecules labeled by the detectable marker;

step (iii) comprises separating the complex from any free affinity molecule labeled by the detectable marker that is not involved in forming the complex in the separation channel of the microfluidic device;

step (iv~~ii~~) comprises:

(a) measuring an amount of the separated complex or detecting a presence of the separated complex; and

(b) determining an amount of the analyte in the sample on the basis of the measured amount or identifying a presence of the analyte in the sample on the basis of the detected presence; and wherein each of the one or more affinity molecules has a property capable of binding to the analyte.

37. (currently amended) The method of claim 10, wherein:

step (i) comprises contacting the sample containing the analyte with the one or more conjugates of the affinity molecule and the charged carrier molecule, wherein at least one of the one or more conjugates is labeled by a detectable marker, to form a complex containing the analyte and the conjugate labeled by the detectable marker;

step (iii) comprises separating the complex from the at least one conjugate labeled by the detectable marker that is not involved in forming the complex in the separation channel of the microfluidic device;

step (iv~~ii~~) comprises:

(a) measuring an amount of the separated complex or detecting a presence of the separated complex; and

(b) determining an amount of the analyte in the sample on the basis of the measured amount or identifying a presence of the analyte in the sample on the basis of the

detected presence; and wherein the affinity molecule in the conjugate has a property capable of binding to the analyte.

38. (currently amended) The method of claim 10, wherein:

step (i) comprises contacting the sample containing the analyte with the one or more affinity molecules and the one or more conjugates of the affinity molecule and the charged carrier molecule, wherein either at least one of the affinity molecules or at least one of the conjugates is labeled by a detectable marker, to form a complex containing the analyte, the affinity molecule, and the conjugate;

step (iii) comprises separating the complex from any free affinity molecule labeled by the detectable marker or the conjugate labeled by the detectable marker that is not involved in forming the complex in the separation channel of the microfluidic device;

step (iv~~ii~~) comprises:

(a) measuring an amount of the separated complex or detecting a presence of the separated complex; and

(b) determining an amount of the analyte in the sample on the basis of the measured amount or identifying a presence of the analyte in the sample on the basis of the detected presence; and wherein each of the affinity molecule and the affinity molecule in the conjugate has a property capable of binding to the analyte.

39. (currently amended) A method for determining an analyte in a sample, the method comprising:

(i) contacting the sample containing the analyte, either the analyte labeled by a detectable marker to form a labeled analyte or an analogue of the analyte labeled by a detectable marker to form a labeled analogue, and an affinity molecule, thereby forming a first complex of the analyte in the sample and the affinity molecule and a second complex of either the labeled analyte and the affinity molecule or the labeled analogue and the affinity molecule;

(ii) providing a microfluidic device having a separation channel filled with a separation media and a ~~charged polymer~~ polyanion added to the separation media;

(iii) electrophoretically separating the second complex from any free labeled analyte or the free labeled analogue that is not involved in forming the second complex using the filled separation channel;

(iv) measuring an amount of the separated second complex or an amount of the separated free labeled analyte or the separated free labeled analogue; and

(v) determining an amount of the analyte in the sample on the basis of the measured amount; wherein the affinity molecule has a property capable of binding to the analyte in the sample and the labeled analyte or a property capable of binding to the analyte in the sample and the labeled analogue, and wherein the polyanion binds sample constituents that bind non-specifically to the affinity molecule, thereby reducing interference with the determination.

40. (currently amended) The method of claim 39, wherein:

step (i) comprises contacting the sample containing the analyte, either the labeled analyte or the labeled analogue, and one or more conjugate of the affinity molecule and a charged carrier molecule, thereby forming a first complex of the analyte in the sample and the conjugate and a second complex of either the labeled analyte and the conjugate or the labeled analogue and the conjugate;

step (iii) comprises separating the second complex from any free labeled analyte or free labeled analogue that is not involved in forming the second complex in the separation channel of the microfluidic device;

step (iv~~ii~~) comprises measuring an amount of the separated second complex or an amount of the separated free labeled analyte or the separated free labeled analogue; and

step (~~i~~v) comprises determining an amount of the analyte in the sample on the basis of the measured amount; and wherein the affinity molecule in the conjugate has a property capable of binding to the analyte in the sample and the labeled analyte or the analyte in the sample and the labeled analogue.

41. (currently amended) The method of claim 39, wherein:

step (i) comprises contacting the sample containing the analyte, either the labeled analyte or the labeled analogue, the affinity molecule, and a conjugate of the affinity molecule and a charged carrier molecule, thereby forming a first complex of the analyte in the sample, the

affinity molecule, and the conjugate and a second complex of either the labeled analyte, the affinity molecule, and the conjugate or the labeled analogue, the affinity molecule, and the conjugate;

step (iii) comprises separating the second complex from any free labeled analyte or the labeled analogue that is not involved in forming the second complex in the separation channel of the microfluidic device;

step (iv~~ii~~) comprises measuring an amount of the separated second complex or an amount of the separated free labeled analyte or the separated free labeled analogue;

step (~~i~~v) comprises determining an amount of the analyte in the sample on the basis of the measured amount; and wherein each of the affinity molecule and the affinity molecule in the conjugate has a property capable of binding to the analyte in the sample and the labeled analyte or the analyte in the sample and the labeled analogue.

42. (currently amended) A method for determining an analyte in a sample, the method comprising:

(i) contacting the sample containing the analyte, either the analyte bound to a charged carrier molecule or an analogue of the analyte bound to a charged carrier molecule, and an affinity molecule labeled by a detectable marker, thereby forming a first complex of either the analyte bound to the charged carrier molecule and the labeled affinity molecule or the analogue bound to the charged carrier molecule and the labeled affinity molecule and a second complex of the analyte in the sample and the labeled affinity molecule;

(ii) providing a microfluidic device having a separation channel filled with a separation media and a ~~charged polymer~~ polyanion added to the separation media;

(iii) electrophoretically separating the first complex from any second complex using the filled separation channel;

(iv) measuring an amount of the separated first complex or an amount of the second complex; and

(v) determining an amount of the analyte in the sample on the basis of the measured amount; ~~and~~ wherein the affinity molecule has a property capable of binding to the analyte in the sample and the analyte bound to the charged carrier molecule or the analyte in the

sample and the analogue bound to the charged carrier molecule, and wherein the polyanion binds sample constituents that bind non-specifically to the affinity molecule, thereby reducing interference with the determination.

43. (original) The method of claim 1, wherein the sample comprises a serum, a plasma, a whole blood, a tissue extract, a cell extract, a nuclear extract, a culture media, a microbial culture extract, members of a molecular library, a clinical sample, a sputum specimen, a stool specimen, a cerebral spinal fluid, a urine sample, a uro-genital swab, a throat swab, or an environmental sample.

44. (original) The method of claim 1, wherein the analyte comprises AFP, hCG, TSH, FSH, LH, interleukin, Fas ligand, CA19-9, CA125, PSA, HBsAg, anti-HIV antibody, or T4.

45–50 (canceled)

51. (currently amended) A method of concentrating an analyte of interest in a sample, the method comprising:

(i) contacting the sample containing the analyte with one or more of a conjugate of an affinity molecule and a charged carrier molecule to form a complex of the analyte and the conjugate;

(ii) providing a microfluidic device having a concentration channel filled with a concentration ~~separation~~ media and a ~~charged polymer~~ polyanion added to the concentration media, the concentration channel having at least one microscale dimension of between about 0.1 and 500 microns; and

(iii) electrophoretically concentrating the complex using the filled concentration channel; ~~and~~ wherein the charged carrier molecule causes a change in a migration property of the analyte by binding to the analyte through the affinity molecule to form a complex of the analyte, the affinity molecule and the charged carrier molecule, and wherein the polyanion binds sample constituents that bind non-specifically to the affinity molecule.

52. (canceled)

53. (original) The method of claim 51, wherein contacting the sample containing the analyte with one or more conjugate of an affinity molecule and a charged carrier molecule to form a complex of the analyte and the conjugate is conducted in a microchannel fluidically connected to the concentration channel having at least one microscale dimension of between about 0.1 and 500 microns.

54. (canceled)

55. (previously presented) The method of claim 51, wherein concentrating the complex is conducted by utilizing the difference in an electrophoretic mobility between the complex and noise constituents in the sample on the basis of charge of the charged carrier molecule.

56. (previously presented) The method of claim 51, wherein concentrating the complex is conducted by utilizing the difference in an adsorption property between the complex and noise constituents in the sample on the basis of charge of the charged carrier molecule.

57. (original) The method of claim 51, wherein concentrating the complex is conducted according to a concentration method selected from the group consisting of field amplification sample stacking (FASS), field amplification sample injection (FASI), isotachophoresis (ITP), isoelectric focusing (IF) and solid phase extraction (SPE).

58. (original) The method of claim 51, wherein concentrating the complex is conducted according to a concentration method selected from the group consisting of field amplification sample stacking (FASS) and isotachophoresis (ITP).

59. (original) The method of claim 51, wherein the charged carrier molecule is an anionic molecule or a cationic molecule.

60. (original) The method of claim 59, wherein the charged carrier molecule is an anionic molecule comprising a nucleotide chain or a sulfonated polypeptide.

61. (original) The method of claim 51, wherein the charged carrier molecule comprises DNA, RNA, a cationic polymer, or a sulfonated polypeptide

62. (original) The method of claim 61, wherein charged carrier molecule comprises DNA comprising one or more synthetic sequences.

63. (original) The method of claim 62, wherein the one or more synthetic sequences comprise one or more nucleotide analogs comprising a linker group or linker reactive group.

64. (original) The method of claim 63, wherein the linker group or linker reactive group comprises an amino group, a thiol, a carboxyl group, an imidazol group, or a succinimide group.

65. (original) The method of claim 64, further comprising covalently bonding a detectable marker to the linker group or the linker reactive group.

66. (original) The method of claim 62, wherein the one or more synthetic sequence consists of one selected from a phosphorothioate analog of nucleotide, a nucleotide that contains a methylene group in the place of the oxygen in the ribose ring, or a nucleotide which has a replacement of the 2'-sugar deoxy substituent with 2'-fluoro, 2'-O-methyl, 2-O-alkoxy]- and 2'-O-allyl modification

67. (original) The method of claim 51, wherein the contacting step further comprises contacting the sample with one or more affinity molecule to form a complex of the analyte, the conjugate and the affinity molecule.

68. (original) The method of claim 51 or 67, wherein the affinity molecule is one which binds to the analyte by a protein-protein interaction, a protein-chemical interaction or a chemical-chemical interaction.

69. (original) The method of claim 51 or 67, wherein the affinity molecule is one which binds to the analyte by an antigen-antibody interaction, a sugar chain-lectin interaction, an enzyme-inhibitor interaction, a protein-peptide chain interaction, a chromosome or nucleotide chain-nucleotide chain interaction, a nucleotide-ligand interaction or a receptor-ligand interaction.

70. (original) The method of claim 51 or 67, wherein the affinity molecule is selected from the group consisting of an antibody, an Fab, $F(ab')_2$ or Fab' fragment of an antibody, an antibody variable region, a lection, avidin, a receptor, an affinity peptide, an aptamer, and a DNA binding protein.

71. (original) The method of claim 67, wherein at least one conjugate or at least one affinity molecule which does not form a conjugate is labeled with a detectable marker.

72. (original) The method of claim 51, wherein at least one of the affinity molecule and the charged carrier molecule forming the conjugate is labeled by a detectable marker.

73. (original) The method of claim 51, wherein the charged carrier molecule in the conjugate is labeled by a detectable marker.

74. (original) The method of claim 51, wherein the affinity molecule in the conjugate is labeled by a detectable marker.

75. (original) The method of claim 67, 71, 72, 73 or 74, wherein the detectable marker is a fluorescent dye, a luminescent dye, a phosphorescent dye, a fluorescent protein, a luminescent protein or particle, a radioactive tracer, a chemiluminescent compound, a redox mediator, an electrogenic compound, an enzyme, a colloidal gold particle, or a silver particle.

76. (canceled)

77. (canceled)

78. (currently amended) The method of claim ~~77~~ 51, wherein the ~~charged polymer~~ polyanion is ~~a polyanionic polymer~~ selected from the group consisting of polysaccharides, polynucleotides, polypeptides, synthetic macromolecular compounds, ceramics and complexes thereof.

79. (currently amended) The method of claim ~~76~~ 51, wherein the ~~charged polymer~~ polyanion is ~~a polyanion~~ selected from the group consisting of poly-dIdC, heparin sulfate, dextran sulfate, polytungstic acid, polyanethole sulfonic acid, polyvinyl sulfate, polyacrylate, chondroitin sulfate, plasmid DNA, calf thymus DNA, salmon sperm DNA, DNA coupled to cellulose, glass particles, colloidal glass, and glass milk.

80–82 (canceled)

83. (currently amended) The method of claim 76, wherein the charged carrier molecule and the ~~charged polymer are~~ polyanion have the same net charge.

84. (currently amended) The method of claim ~~81~~ 51, wherein the ~~charged polymer~~ polyanion comprises heparin sulfate.

85. (canceled)

86. (currently amended) The method of claim ~~85~~ 51, wherein the concentration media comprises a size exclusion resin, a polyacrylamide gel, polyethylene glycol (PEG), polyethyleneoxide (PEO), a co-polymer of sucrose and epichlorohydrin, polyvinylpyrrolidone (PVP), hydroxyethylcellulose (HEC), poly-N,N-dimethylacrylamide (pDMA), or an agarose gel.

87. (canceled)

88. (currently amended) The method of claim ~~87~~ 51, wherein the ~~charged polymer~~ polyanion is ~~present in~~ added to the concentration media at a concentration of between about 0.01 to 5%.

89. (currently amended) The method of claim ~~87~~ 51, wherein the ~~charged polymer~~ polyanion is ~~present in~~ added to the concentration media at a concentration of between about 0.05 to 2%.

90. (canceled).

91. (currently amended) The method of claim ~~90~~ 51, wherein the ~~charged polymer~~ polyanion comprises heparin sulfate which is ~~present in~~ added to the sample buffer at a concentration of between about 0.001 to 2%.

92. (original) The method of claim 51, wherein the concentration channel has at least one cross-sectional microscale dimension of between about 0.1 and 200 microns.

93. (currently amended) A method of detecting or identifying an analyte of interest in a sample, the method comprising:

(i) contacting the sample containing the analyte with one or more conjugates of an affinity molecule and a charged carrier molecule to form a complex of the analyte and the conjugate;

(ii) providing a microfluidic device having a concentration channel filled with a concentration ~~separation~~ media and ~~a charged polymer~~ polyanion added to the concentration media, the concentration channel having at least one microscale dimension of between about 0.1 and 500 microns;

(iii) concentrating the complex using the filled concentration channel;

(iv) electrophoretically separating the complex and any unbound conjugate by using a separation channel in a microfluidic device comprising at least one separation channel, the separation channel being filled with a separation media and ~~a charged polymer~~ polyanion added to the separation media, the separation channel having at least one microscale dimension of between about 0.1 and 500 microns; and

(v) detecting the complex to identify the presence of the analyte or to determine an amount of the analyte in the sample, wherein the ~~contacting,~~ concentrating and/or separating step is conducted in the presence of ~~a charged polymer~~ polyanion, ~~which~~ wherein the polyanion binds sample constituents that bind non-specifically to the affinity molecule, thereby ~~reduces~~ reducing

interference with detecting~~;~~, and wherein the charged carrier molecule causes a change in a migration property of the analyte by binding to the analyte through the affinity molecule to form a complex of the analyte, the affinity molecule and the charged carrier molecule.

94. (previously presented) The method of claim 36, wherein two or more affinity molecules are used, and wherein each affinity molecule has a property capable of binding with the analyte at a different site on the analyte from every other affinity molecule.

95. (previously presented) The method of claim 37, wherein two or more conjugates are used, and wherein each affinity molecule in the two or more conjugates has a property capable of binding with the analyte at a different site on the analyte from every other affinity molecule, and wherein the charged carrier molecule has a property capable of causing a change in a separation property of the analyte by binding to the analyte through the affinity molecule to form a complex of the analyte, the affinity molecule, and the charged carrier molecule.

96. (previously presented) The method of claim 38, wherein two or more affinity molecules are used, and wherein each affinity molecule has a property capable of binding with the analyte at a different site on the analyte from every other affinity molecule, and wherein the charged carrier molecule has a property capable of causing a change in a separation property of the analyte by binding to the analyte through the affinity molecule to form a complex of the analyte, the affinity molecule, and the charged carrier molecule.

97. (previously presented) The method of claim 39, wherein two or more affinity molecules are used, and wherein each affinity molecule has a property capable of binding with the analyte in the sample and the labeled analyte at a different site on the analyte in the sample and a different site on the labeled analyte from every other affinity molecule, or each affinity molecule has a property capable of binding with the analyte in the sample and the labeled analogue at a different site on the analyte in the sample and a different site on the labeled analogue from every other affinity molecule.

98. (previously presented) The method of claim 40, wherein two or more conjugates are used, and wherein each affinity molecule in the two or more conjugates has a property capable of binding with the analyte in the sample and the labeled analyte at a different site on the analyte in the sample and a different site on the labeled analyte from every other affinity molecule, or each affinity molecule in the conjugate has a property capable of binding with the analyte in the sample and the labeled analogue at a different site on the analyte in the sample and a different site on the labeled analogue from every other affinity molecule, and wherein the charged carrier molecule has a property capable of causing a change in a separation property of the labeled analyte or the labeled analogue by binding to the labeled analyte or the labeled analogue through the affinity molecule to form a complex of the labeled analyte or the labeled analogue, the affinity molecule, and the charged carrier molecule.

99. (previously presented) The method of claim 41, wherein two or more affinity molecules are used, and wherein each affinity molecule has a property capable of binding with the analyte in the sample and the labeled analyte at a different site on the analyte in the sample and a different site on the labeled analyte from every other affinity molecule, or each affinity molecule has a property capable of binding with the analyte in the sample and the labeled analogue at a different site on the analyte in the sample and a different site on the labeled analogue from every other affinity molecule, and wherein the charged carrier molecule has a property capable of causing a change in a separation property of the labeled analyte or the labeled analogue by binding to the labeled analyte or the labeled analogue through the affinity molecule to form a complex of the labeled analyte or the labeled analogue, the affinity molecule, and the charged carrier molecule.

100. (previously presented) The method of claim 42, wherein two or more affinity molecules are used, and wherein each affinity molecule has a property capable of binding with the analyte in the sample and the analyte bound to the charged carrier molecule at a different site on the analyte in the sample and a different site on the analyte bound to the charged carrier molecule from every other affinity molecule, or each affinity molecule has a property capable of binding with the analyte in the sample and the analogue bound to the charged carrier molecule at a different site on the analyte in the sample and a different site on the analogue bound to the

charged carrier molecule from every other affinity molecule, and wherein the charged carrier molecule has a property capable of causing a change in a separation property of the first complex by binding to the analyte or the analogue to form a complex of the analyte, the affinity molecule, and the charged carrier molecule.